

TEKLA BASECAMP

AUG. 27 - 29

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Estimating for Contractors and Precasters



Formwork Session Review

- Updates
- Warehouse Content
 - Manufacturer, generic
 - Formwork tools
 - Slabs
 - Walls
- Setup and Configuration
- Custom components

Manufacturer and generic downloads currently available

Formwork content in Warehouse

Warehouse Content: What you can currently access

- Main tools
 - Formwork tools for slabs
 - Formwork tools for walls
- Suppliers
 - Doka (Configuration for Framax only)
 - Hunnebeck
 - Peri (configuration for skydeck only)



Contact your suppliers!!



A BRAND COMPANY



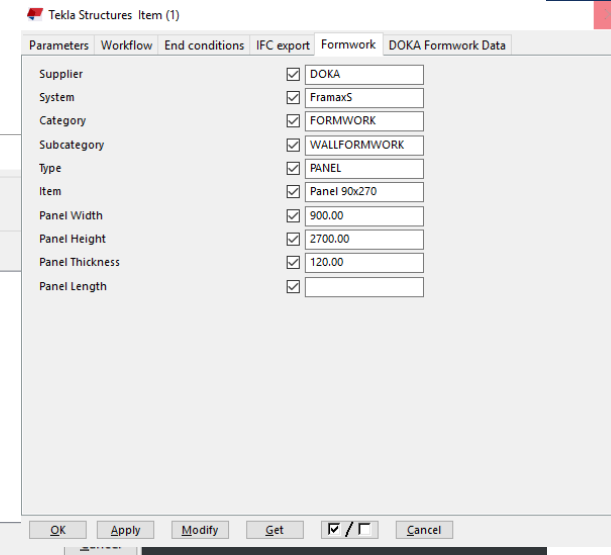
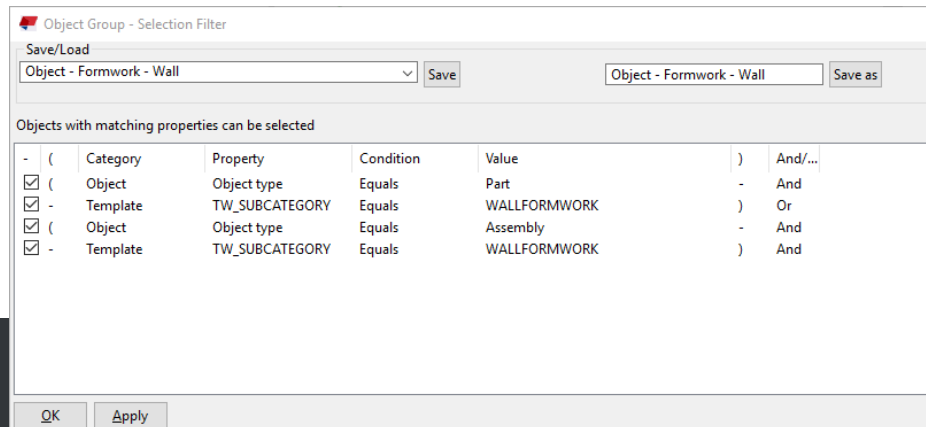
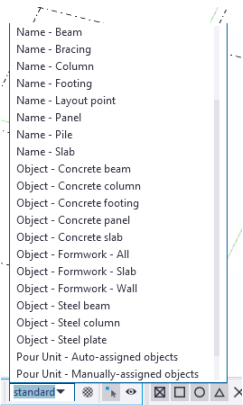
New features

Formwork tool Updates



Easier to control formwork items

- Formwork placing tools now automatically write UDA's on placed items
- These attributes enable easier control for formwork items in model and drawing side
- Usable for ribbon controls, selection and view filters, drawing settings



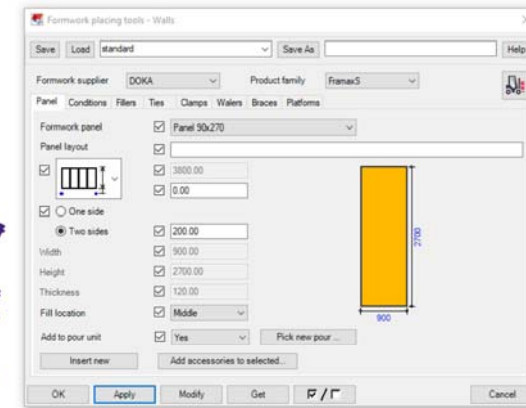
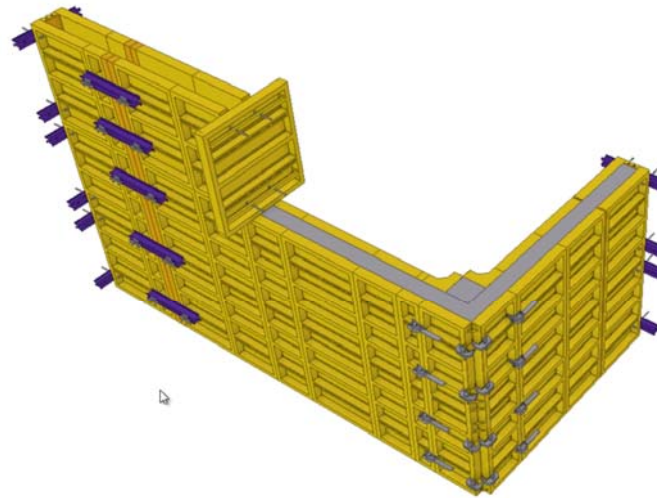
Easier to control formwork items

Formwork tools are writing attributes below by following basis

- **TW_CATEGORY =**
 - FORMWORK if Formwork placing tools are used
- **TW_SUBCATEGORY =**
 - WALL FORMWORK if Formwork placing tools - Walls is used
 - SLAB FORMWORK if Formwork placing tools - Slabs is used
- **TW_TYPE =**
 - PANEL / CLAMP / CROSS GIRDER etc. based on Formwork placing tool dialog used
- **TW_SUPPLIER =**
 - Based on Supplier set on .csv configuration file
- **TW_SYSTEM**
 - Based on Family set on .csv configuration file
- **TW_ITEM**
 - Based on setting name set either in .csv configuration file or condition name
 - Note! Can't be used in QTO because all items inside condition get same TW_ITEM attribute
- **TW_LENGTH / TW_WIDTH / TW_HEIGHT / TW_THICKNESS**
 - Based on panel dimensions set in the xxx.FormworkTools.Fillers.csv and xxx.FormworkTools.SlabPanels.csv files

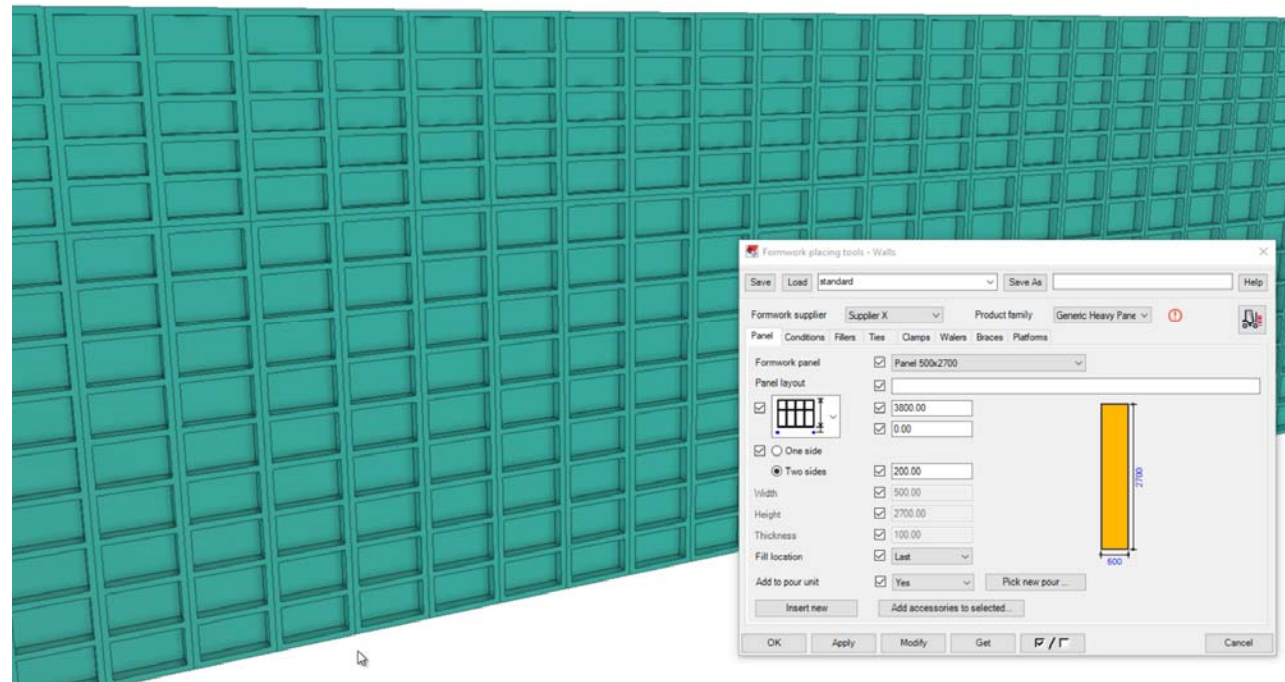
Add accessories quickly

- It's now possible to use applied settings to automatically add accessories to formwork layouts and individual panels



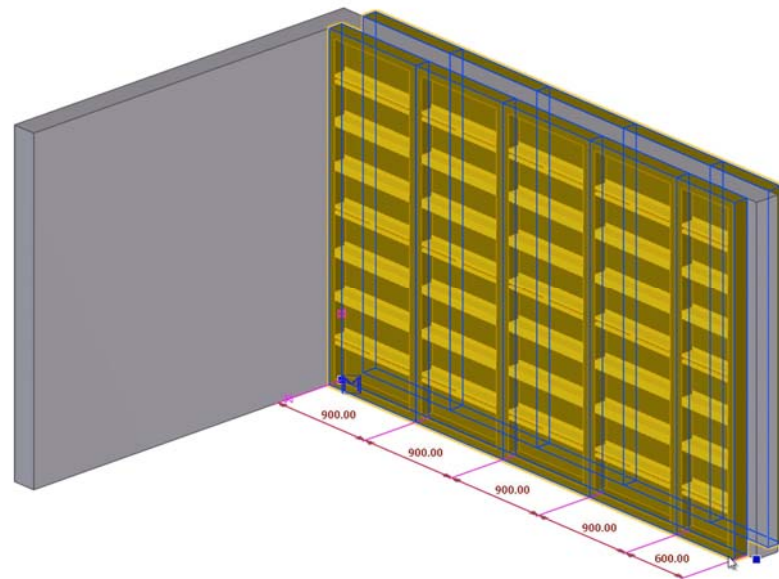
Direct modification of panel layout

- Change panels in wall formwork layout with Direct modification
- You can also change the panels in tool dialog



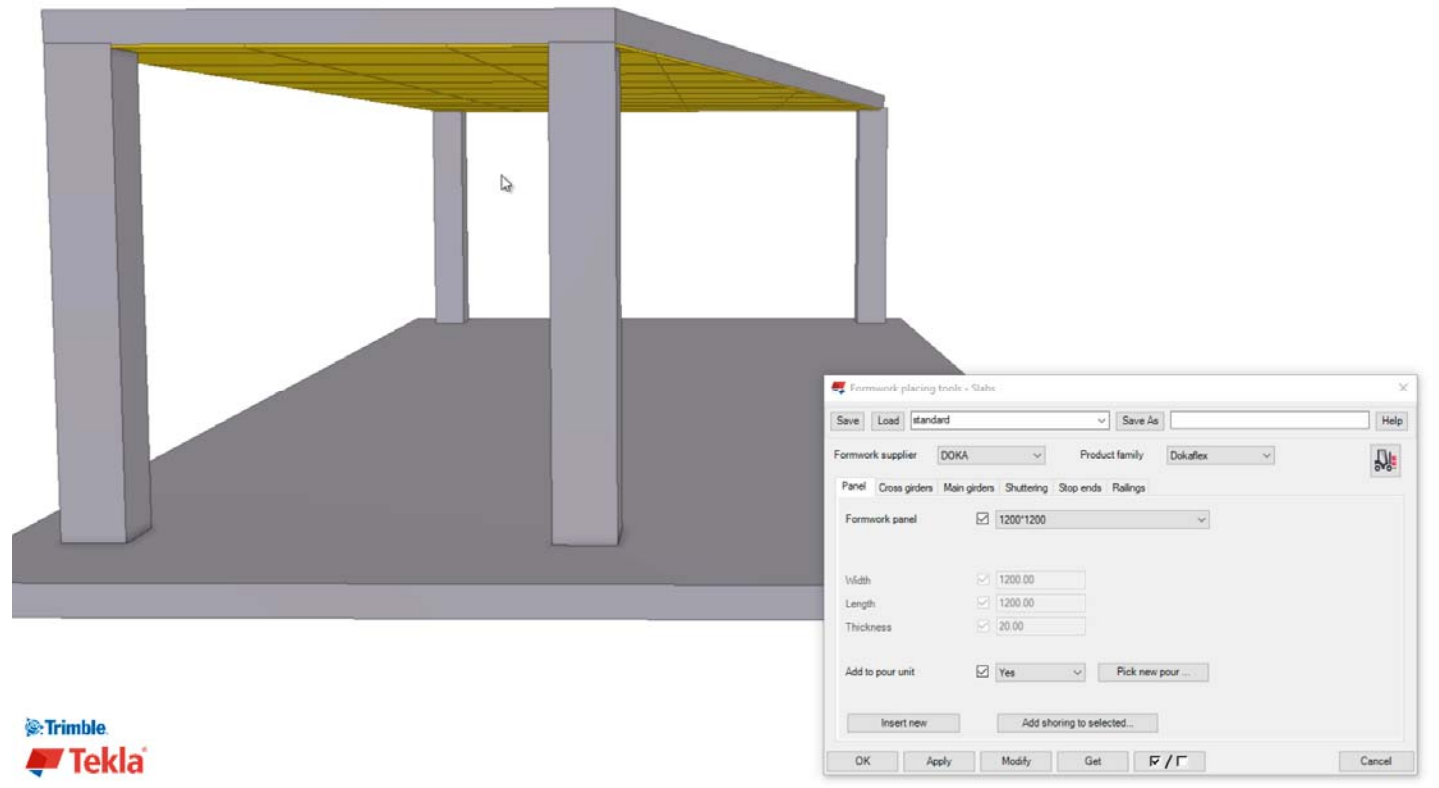
Parametric custom parts for conditions

- Corner and panel sub custom parts can be made parametric
- One use case is to have a bulkhead filler that follows direct modification



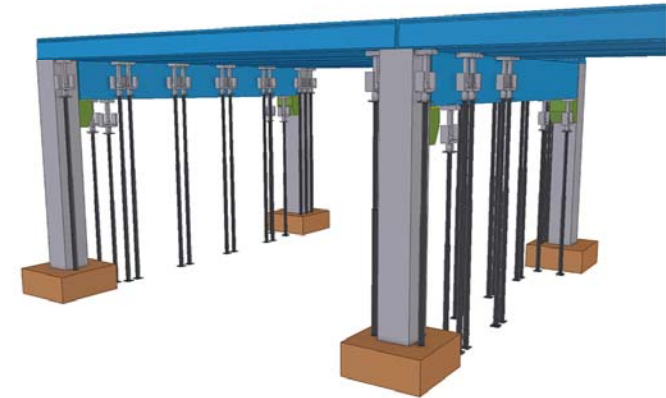
Add girders and shoring quickly

- It's now possible to add girders and shoring in one go
- <https://jira.trimble.tools/browse/TEX-4928>



Shore any structure

- It's now possible to use Formwork placing tools – Slabs to shore any structure
- Opens up completely new use cases

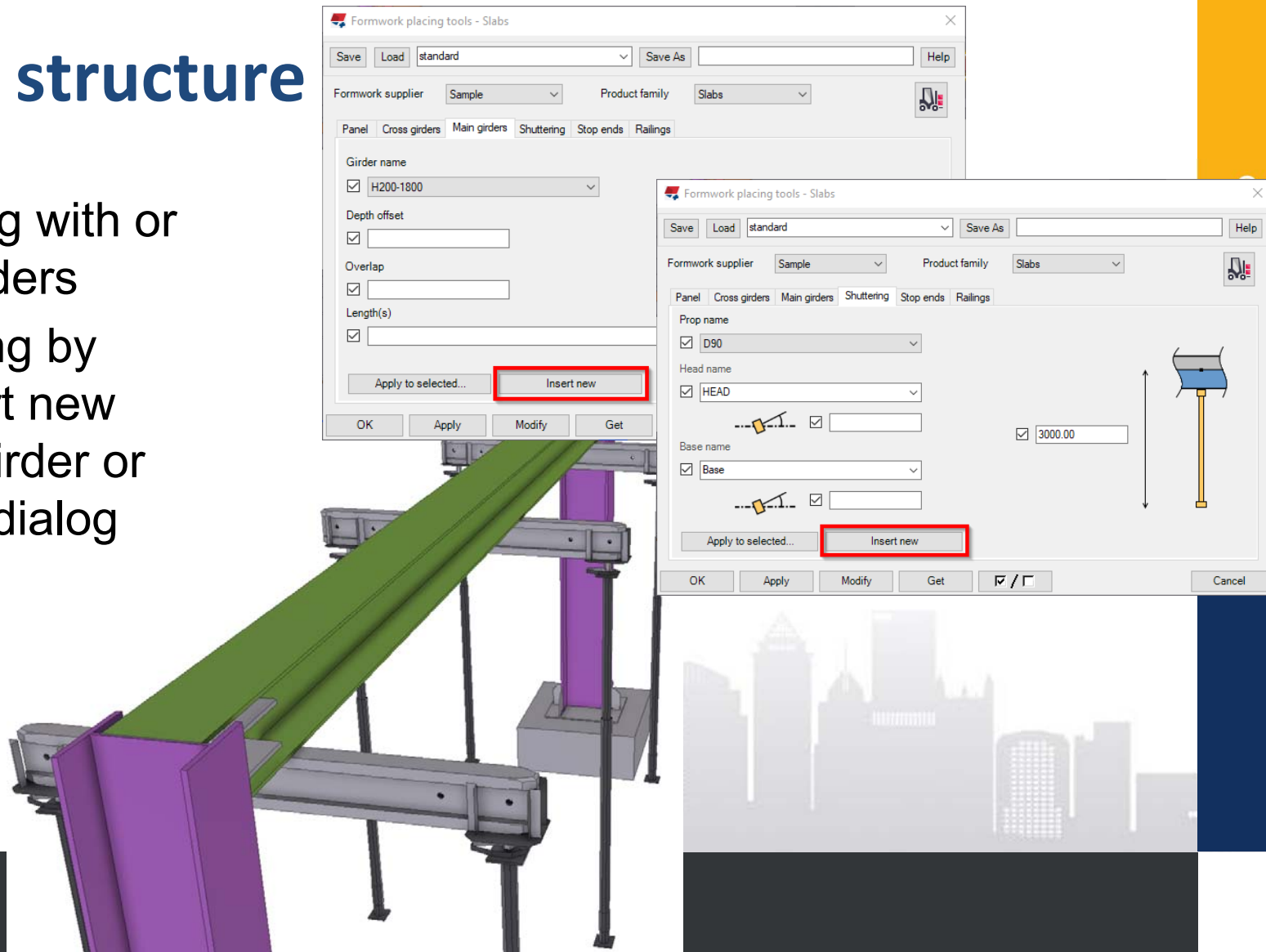


 Trimble.

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Shore any structure

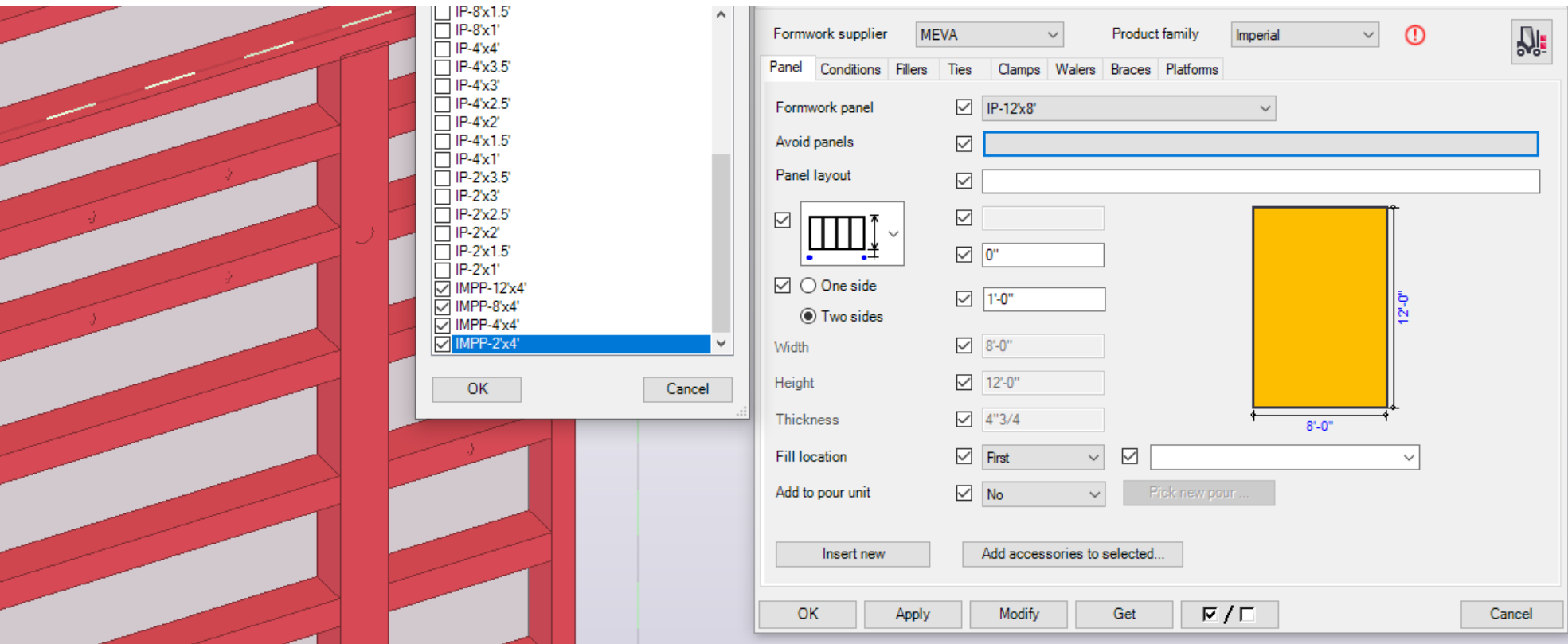
- Add shoring with or without girders
- Start placing by using Insert new either on girder or shuttering dialog



A review of the features for next formwork tools release

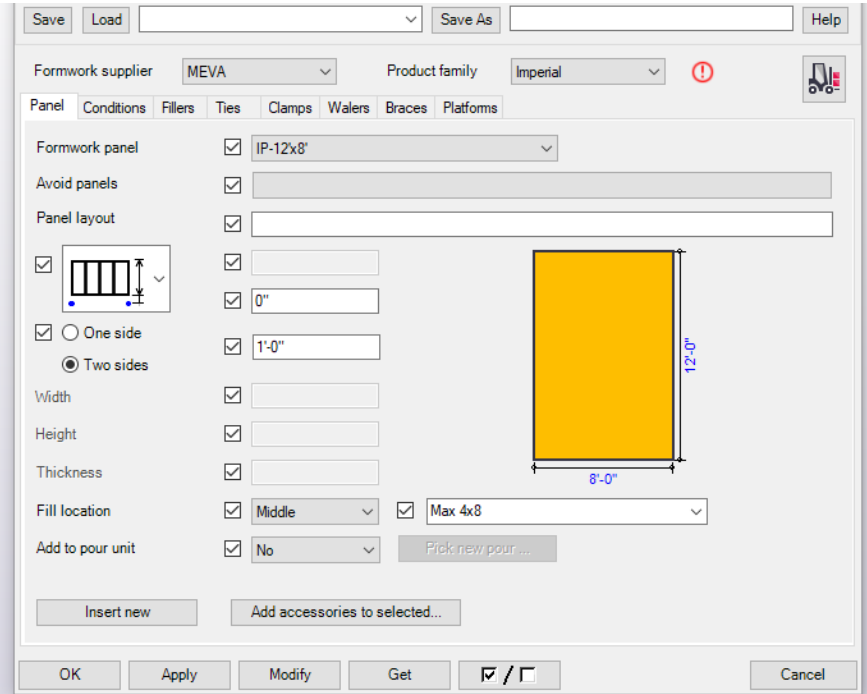
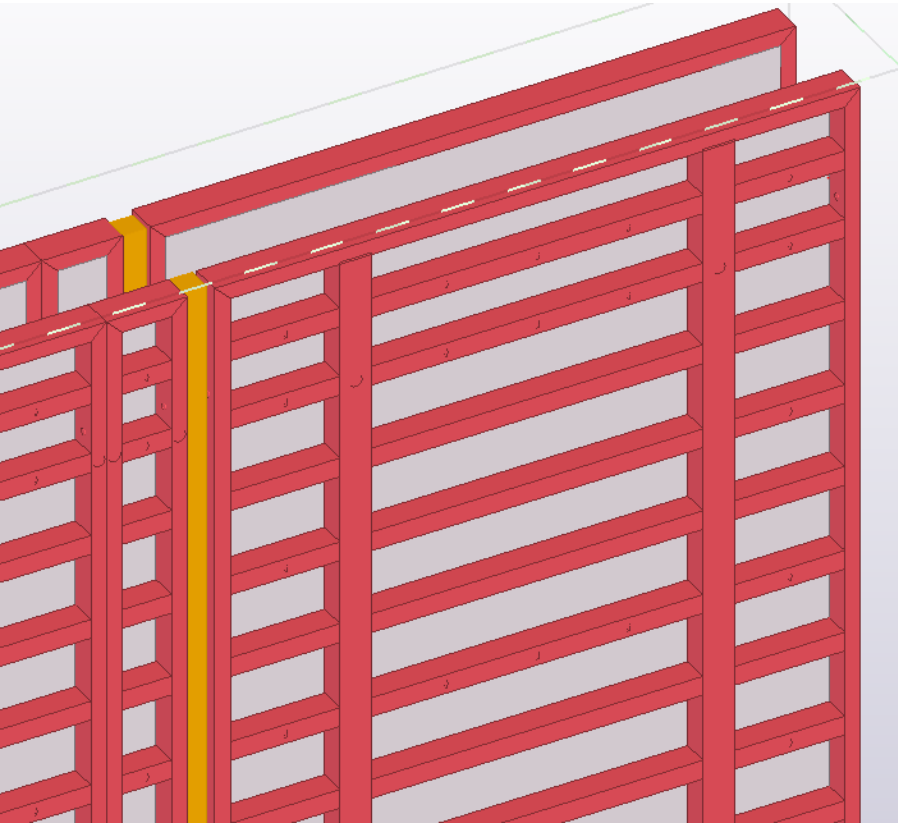
Upcoming New Features





Avoid Panels

Select panels that you do not want to use or not available in inventory.



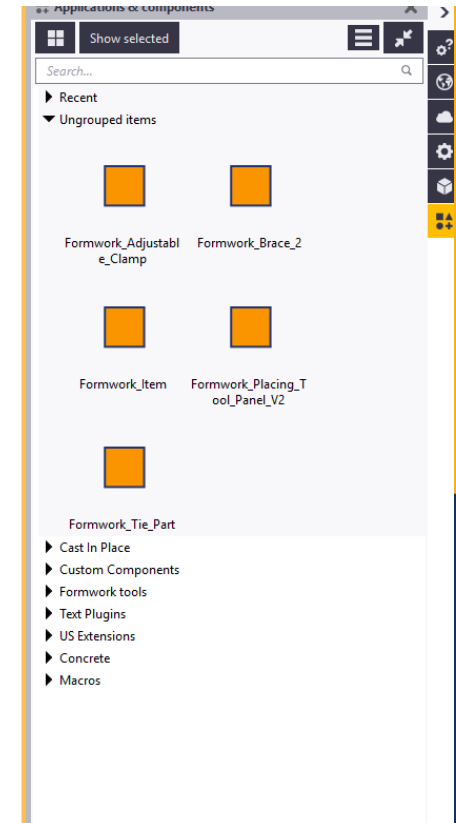
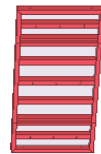
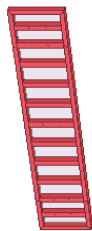
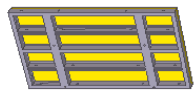
Fill Location

Automatically add fillers using setting in Filler configuration file.



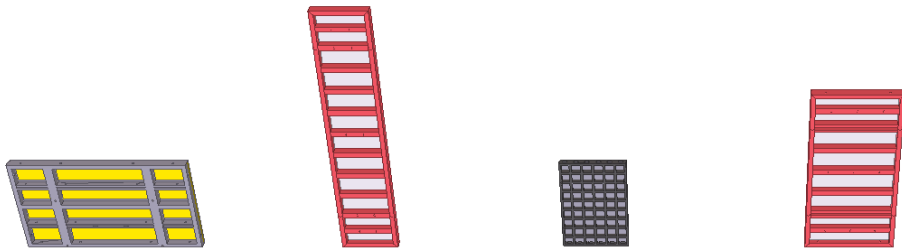
Transitioning to new Format

- Current Format
 - >1,500 components
 - Manual setup
 - No configuration Files
- New
 - 10 components (or less)
 - Auto setup (via TSEP)
 - Configuration files
 - Doka
 - Peri
 - Generic
 - Documentation for setup

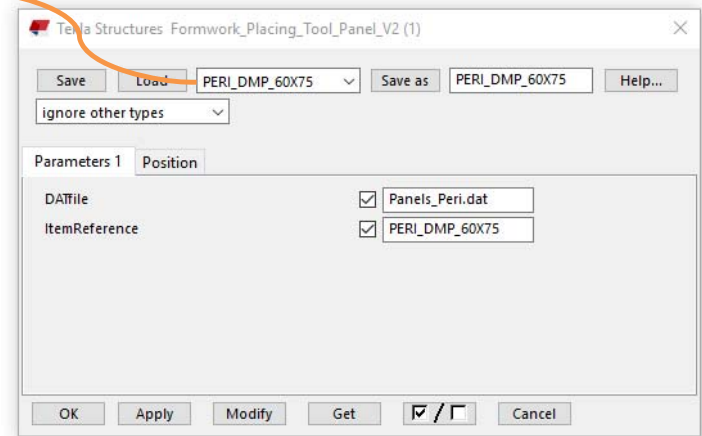


Much easier setup

Save time creating components by specifying attributes for components. Can reduce the amount of components by 95% or greater.



- standard
- < ExternalDesign >
- DOKA_FramaxPlus_1350x1350
- DOKA_FramaxPlus_1350x300
- DOKA_FramaxPlus_1350x450
- DOKA_FramaxPlus_1350x600
- DOKA_FramaxPlus_1350x750
- DOKA_FramaxPlus_1350x900
- DOKA_FramaxPlus_2700x1350
- DOKA_FramaxPlus_2700x2400
- DOKA_FramaxPlus_2700x2700
- DOKA_FramaxPlus_2700x300
- DOKA_FramaxPlus_2700x450
- DOKA_FramaxPlus_2700x600
- DOKA_FramaxPlus_2700x750
- DOKA_FramaxPlus_2700x900
- DOKA_FramaxPlus_3300x1350
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- DOKA_FramaxPlus_3300x600
- DOKA_FramaxPlus_3300x750
- DOKA_FramaxPlus_3300x900
- DOKA_FramaxPlus_600x300
- DOKA_FramaxPlus_600x450
- DOKA_FramaxPlus_600x600
- DOKA_FramaxPlus_600x750
- DOKA_FramaxPlus_600x900
- DOKA_FramaxS_1350x1050
- DOKA_FramaxS_1350x1220(U)
- DOKA_FramaxS_1350x1350
- DOKA_FramaxS_1350x300
- DOKA_FramaxS_1350x450
- DOKA_FramaxS_1350x600



Much easier setup!

Save time creating components by specifying attributes for components. Can reduce the amount of components by 95% or greater.

Supplier	Family	Name	PanelName	PanelAttributes
DOKA	Framax	2700x300	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_2700x300
DOKA	Framax	1350x300	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_1350x300
DOKA	Framax	3300x300	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3300x300
DOKA	Framax	3000x300	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3000x300
DOKA	Framax	2700x450	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_2700x450
DOKA	Framax	1350x450	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_1350x450
DOKA	Framax	3300x450	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3300x450
DOKA	Framax	3000x450	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3000x450
DOKA	Framax	3300x550	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3300x550
DOKA	Framax	2700x600	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_2700x600
DOKA	Framax	1350x600	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_1350x600
DOKA	Framax	3300x600	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3300x600
DOKA	Framax	3000x600	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_3000x600
DOKA	Framax	2700x750	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_2700x750
DOKA	Framax	1350x750	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_1350x750
DOKA	Framax	2700x900	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_2700x900
DOKA	Framax	1350x900	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_1350x900
DOKA	Framax	900x900(U)	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_900x900(U)
DOKA	Framax	2700x900(U)	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_2700x900(U)
DOKA	Framax	1350x900(U)	Formwork_Placing_Tool_Panel_V2	DOKA_Framax_1350x900(U)

Much easier setup

Specify attribute in each configuration file. E.g. PanelAttributes, Clamp1Attributes, WalerAttributes, etc.

Transitioning to new Format

- New content

- 10 components (or less)

1% of current number of components. Peri has over 1,000 components. Models take 7.5 minutes to open

- Auto setup (via TSEP)

Ready to go after install!

- Configuration files

- Doka

- Peri

- Generic

Useable!

- Documentation for setup

Make your own!

Parametric custom parts for conditions

The custom part can contain the following parameters

- "FPT_Thickness0" – Thickness of the wall 1 (typically parallel to the 'red' axis)
- "FPT_Thickness1" – Thickness of the wall 2 (typically parallel to the 'green' axis)
- "FPT_PilasterDepth0" – Pilaster depth (along 'green' axis) at pilaster and corner pilaster
- "FPT_PilasterDepth1" – Pilaster depth (along 'red' axis) at inner corner pilaster
- "FPT_BulkHeadOffset" – The bulkhead offset (only in case of bulkhead conditions)

Live Demonstration

Formwork tools for Walls



Live demonstration

Formwork tools for Slabs

